## **Industrial Pretreatment Newsletter**

Published for industrial dischargers by the King County Industrial Waste Program (KCIW)





Department of Natural Resources and Parks Wastewater Treatment Division **Industrial Waste Program** 

Fall 2013

#### **Mission Statement**

The mission of the Industrial Waste Program is to protect the environment, public health, biosolids quality, and King County's regional sewerage systems. We work cooperatively with our customers as we regulate industrial discharges, provide technical assistance, and monitor the regional sewerage system.

### Industrial Waste Advisory Committee

Terry Beals, Sound Transit Kevin Burrell, Environmental Coalition of South Seattle (ECOSS) Wendee Cook, Exotic Metals Forming Co. Ken Falcone, Cargill, Inc. Donna Hoskins, Sanofi-Aventis U.S. Mark LaFata, Aerojet-General Tim Lew, Pepsi-Cola Co. Steve Simacek, Hytek Finishes Gail Spencer, Vigor Shipyards Heather Trim, Futurewise Doris Turner, Boeing Commercial Airplane Group - Renton Chris VanHoof, City of Kent Scott Woerman, Landau Associates

## 2012 KCIW Rewards and Recognition Program

(Awarded in 2013 and listed here throughout that year)

#### 2012 Silver Awards

(Awarded to 20 percent of KCIW's 2012 industrial wastewater discharge permittees)

Accurate Industries
Amgen Corp. - Bothell
Amgen Corp. - Seattle
Davis Wire Corp.
G & K Services
Hexcel Corp.
Honeywell International Inc.

(Continued on page 2)



# KCIW's compliance sampling and monitoring program

Frequency, types of samples and changes

Monitoring the wastewater discharge from a facility through environmental sampling is one of the most critical components of assessing compliance with environmental regulations. KCIW receives over 90 percent of the environmental data it uses to assess compliance from the industrial users of the sewer system. The rest of the data comes from KCIW monitoring.

The program manages all the data collected through KCIW's database. KCIW has developed automated computer routines that compare each data point to the discharge limits associated with each locator (sample site),



creating a report with a determination of compliance.

Self-monitoring sampling frequencies at permitted facilities range from multiple times a day to once per year or less (as is the case for mid-tier or non-significant categorical industrial users). Construction sites have to check pH, settleable solids, flow and other pollutant parameters of concern throughout the day. Many facilities sample monthly for metals of concern, cyanide, FOG and/or organics. Per King County Code, KCIW monitors for heavy metals, cyanide and FOG and for organics twice per year with exceptions where the facility is not a categorical industrial user. Hauled septage waste at the county's South Treatment Plant is tested for metals on a quarterly basis.

Compliance sampling is planned and conducted by KCIW's sampling crew and the analysis is performed by the King County Environmental Laboratory.

(Continued on page 6)

### KCIW Updates



### Commitment to excellence earns honors for King County wastewater treatment facilities

Four King County wastewater treatment plants earned state and national honors for outstanding performance and environmental compliance in 2012. The South Treatment Plant in Renton and the West Point Treatment Plant in Seattle each received Platinum Peak Performance awards from the National Association of Clean Water Agencies, or NACWA.

Platinum level awards indicate multiple consecutive years of compliance with effluent limits established by National Pollutant Discharge Elimination System (NPDES) permit under the federal Clean Water Act and the state's Water Pollution Control Law.

King County's Vashon and Carnation treatment plants received Gold awards from NACWA for 100 percent compliance for effluent limits within the past calendar year. In addition, the Vashon Treatment Plant earned the state Department of Ecology's (Ecology) "Outstanding Performance Award" for 2012.

#### **KCIW Industrial User Surveys**

As a part of an ongoing evaluation required by federal regulation,

KCIW mails both individual and sector-specific targeted surveys to identify facilities that may require an authorization to discharge wastewater to King County's sanitary system. The program recently sent surveys to business owners operating through a lease or sublease agreement with the Port of Seattle; businesses associated with the aerospace industry, and facilities in the Lower Duwamish and other areas following referrals from other agencies.



KCIW's standard Industrial Waste Program Survey is located at www.kingcounty.gov/environment/wastewater/IndustrialWaste/Forms/ApprovalForms.aspx

#### **Regulatory Update**

#### **New Pharmaceutical Take-Back Rule**

The King County Wastewater Treatment Division (WTD) strongly supports a new rule that will require pharmaceutical companies to ensure the safe disposal of unused prescription and over-the-counter medicines sold or distributed in King County.

Passed by the King County Board of Health on June 20, the rule requires drug manufacturers to develop their own product

#### (AWARDS-Continued from page 1)

King County Solid Waste
Division - Bow Lake Transfer
Station

King County Solid Waste Division - Factoria Transfer Station

King County Solid Waste Division - Houghton Transfer Station

King County Solid Waste Division - Shoreline Transfer Station

King County Solid Waste Division - Vashon Transfer Station

National Industrial Concepts
Pepsi Beverages Co. - Seattle
Facility

Prototron Circuits Inc.
Qualawash Holdings LLC
Redhook Brewing Co.
Skills Inc. - Ballard Facility
Terex Washington Inc. - North

Campus Terex Washington Inc. - South

Campus
The Boeing Co. - Plant 2 Facility
Universal Sheet Metal Inc.
Washington State Department
of Transportation - Viaduct S. Holgate St. to S. King St.
Stage 3 Atlantic Bypass Project
Washington State Department
of Transportation - Viaduct
Replacement Project, SR99
Bored Tunnel

2012 Gold Awards (Awarded to 38 percent of KCIW's 2012 industrial wastewater discharge permittees) Alaskan Copper Works - 6th Ave. Art Brass Plating Inc. ASKO Processing Inc. Baker Commodities Inc. Black Oxide LLC Boeing Commercial Airplane -Auburn Boeing Commercial Airplane -North Field Boeing Commercial Airplane -Renton Boeing Electronics Center BP West Coast Products LLC Burlington Northern Santa Fe -Interbay Facility

Carl Zapffe Inc. Crane-Eldec Corp.

Electrofinishing Inc.

Foss Maritime Co.

Exotic Metals Forming Co.

2

### KCIW Updates



Glacier Northwest Inc.,(dba) Cal Portland

GM Nameplate Inc. Hytek Finishes Co.

**Industrial Container Services** Island Spring Inc.

Kenworth Truck Co.

King County Road Services Division - Renton Decant Facility

King County Solid Waste Division - Renton Transfer Station

King's Command Foods Inc. Magnetic and Penetrant Services Co.

Mastercraft Metal Finishing Inc. Port of Seattle, Seattle-Tacoma International Airport, BW

Port of Seattle, Seattle-Tacoma International Airport, IWS

Precor Inc. - Plant 1 Precor Inc. - Plant 2

Primus International - University **Swaging Division** 

Protective Coatings Inc. Rabanco Recycling Co.

Ralcorp Frozen Bakery Products

Safeway Inc. - Beverage Plant Seattle Public Utilities - Kent Highlands Landfill

Skills Inc. - Auburn Facility Sound Transit - Capitol Hill

Station Sound Transit - U230 Tunneling Pine Street

Sound Transit - University of Washington Station

Tim's Cascade Snacks

Tri-Way Industries Inc.

Vectra Fitness Inc.

Washington State Department of Transportation - SR 520 Bridge Replacement and HOV **Program Construction Site** 

Western Pneumatic Tube

#### 2012 Commitment-to-**Compliance Awards**

(Awarded to 5 percent of KCIW's 2012 industrial wastewater discharge permittees)

Boeing Commercial Airplane -Renton

**Boeing Electronics Center** Burlington Northern Santa Fe -Interbay Facility

Electrofinishing Inc.

Glacier Northwest Inc., (dba) Cal

Portland

Protective Coatings Inc.

stewardship plans and to cover the cost of operating a program that will enable residents to drop off, free-of-charge, leftover and expired medicines at most retail pharmacies or law enforcement offices.

Many people flush the medications to keep them away from children or pets, which creates environmental impacts because the treatment process was not designed to

break down these chemicals.

ŖХ The new rule will help reduce the loading of pharmaceuticals into the sanitary sewer system and protect the quality of WTD's biosolids, effluent, and reclaimed water. The regulation is only the second of its type in the nation, establishing King County as a leader in this emerging environmental issue.

For more information, go to the Public Health – Seattle and King County website, www.kingcounty.gov/healthservices/health/BOH/ MedicineTakeback.aspx.

#### **Public Disclosure Requests**

According to the King County Department of Natural Resources and Parks public records manager, the number of requests for environmental records is increasing and is one of the most common public record requests received by the County. KCIW staff recently attended training on Washington State's Public Records Act to become more familiar with the act and its intent and to review current policies and procedures within King County government.

KCIW staff responds to an average of 20 requests annually, the majority from consultants seeking information during environmental site assessments, and others related to litigation cases. KCIW notifies facilities when it receives public disclosure requests concerning them.

For information about procedures for public disclosure requests, go to www.kingcounty.gov/operations/policies/aep/informationaep/ inf1722aep.aspx.

#### **About the Industrial Pretreatment Newsletter**

Published by the Industrial Waste Program, Wastewater Treatment Division, King County Department of Natural Resources and Parks

Editor: Dana West, KCIW

Contributors this edition: Ken Grimm, PPRC; Despina Strong, KCIW

Photos: Ned Ahrens, King County Department of Transportation and Tim O'Leary, Department

of Natural Resources and Parks

Layout: Sandra Kraus, KCIT GIS, Visual Communications & Web Group

Read newsletters and about KCIW at: www.kingcounty.gov/ IndustrialWaste

#### **Contact information:**

King County Industrial Waste Program (KCIW), 130 Nickerson St., Ste. 200, Seattle, WA 98109-1658. Phone: 206-263-3000 or TTY: 711. Email: info.kciw@kingcounty.gov

This material is provided in alternative formats upon request by calling 206-263-3000 or TTY relay: 711

### 2012 Commitment-to-Compliance award winners

Employee dedication, organization and training are practices companies and facilities cite as contributing to their achieving the coveted KCIW Commitment-to-Compliance award, given for five years of excellent compliance with regulations. As KCIW's Rewards and Recognition Program advances, facilities are winning concurrent Commitment-to-Compliance awards, demonstrating excellent compliance for 10 and even 15 years in a row.

KCIW recognizes all of the achievements that help King County protect human health and enhance the environment. **Congratulations**, **Commitment-to-Compliance award winners!** 

#### **Boeing Commercial Airplane Group - Renton**

#### Winner of three consecutive Commitment-to-Compliance awards

With its 2012 award, Boeing Commercial Airplane – Renton has earned 15 consecutive years' of Gold awards resulting in three Commitment-to-Compliance awards in a row. This facility has also won a 2001 KCIW EnvirOvation award, and in 2003 was awarded King County's Green Globe award for Leader in Industrial Waste Reduction.

The facility's manufacturing operations include cleaning, chemical milling, chemical finishing, mechanical machining, heat-treating and anodizing. With a permitted wastewater discharge volume of 135,000 gallons per day (gpd), the facility treats its wastewater at a primary treatment facility at the site.

Boeing-Renton attributes employees' deep commitment to environmental stewardship as a driver for its excellent compliance record. The facility believes that its extensive oversight over defined processes and systematic procedures,

with specialized personnel assigned to compliance tasks also contributes significantly.



Left to right, front row: Despina Strong, KCIW environmental programs managing supervisor; Greg Bush, section manager, King County Wastewater Treatment Division; Terry Hoskinson, wastewater treatment plant operator; Alicia Nielsen, environmental engineer. Second row: Doris Turner, environmental engineer; Les Weige, Director 737 Program environmental health and safety; Richard Stewart, site services senior manager; Arnaud Girard, KCIW compliance investigator; Chad Kiehn, site services manager.

#### **Burlington Northern Santa Fe - Interbay Facility**

#### Receiving its second Commitment-to-Compliance award

The BNSF - Interbay facility in Seattle is a locomotive repair, maintenance, and fueling facility approved to discharge 288,000 gpd. The facility generates wastewater that includes contaminated stormwater and industrial wastewater generated during the maintenance and cleaning of locomotives, maintenance pits, fueling pads, and tracks. The wastewater is



Left to right: Mark James, manager environmental engineering; Jennifer Wiener, manager environmental operations; Tom Long, engineering technician, Farallon Consulting; Despina Strong, KCIW environmental programs managing supervisor; Ryan Hibbs, project scientist.

pumped to an above ground oil/water separator, then flows to a 75,000-gallon surge tank before discharging to the sanitary sewer. The facility won a first Commitment-to-Compliance award in 2001.

#### **Boeing Electronics Center**

## Winning its second Commitment-to-Compliance award

Having won a Commitment-to-Compliance award in 2004, the Boeing Electronics Center in Renton is celebrating its second win this year. Permitted to discharge 15,000 gpd, facility activities include microelectronics research and development, small-scale printed circuit board fabrication assembly for both research and development and manufacturing components, and testing of aerospace components. There are engineering research labs and limited chemical etching and tank line operations, and a supporting wastewater treatment plant.

## Glacier Northwest Inc., (dba) CalPortland

### Winning a second consecutive Commitment-to-Compliance award

CalPortland's Kenmore concrete batch plant manufactures ready-mix concrete. The facility is permitted to discharge 110,000 gpd of wastewater that may contain sediment and have high pH.

To what does the Kenmore facility attribute its successful compliance record? Its reliable and well-maintained water treatment system is credited, as are committed, well-trained employees. These employees understand

the level of compliance they need to adhere to, and as a result, make good decisions to support a company goal of absolute environmental compliance.



Left to right, front row, : John Downs, site foreman; Matthew Hinck, environmental manager. Second row: Rich Bolen, driver; Scott Nicholson, aggregates manager; Pat Magnuson, KCIW compliance investigator; Sean Fant, site superintendent; Doyle Davis, ready mix concrete manager; Greg Newborn, KCIW compliance investigator.

#### **Electrofinishing Inc.**

#### First-time winner

Small companies can also establish excellent compliance records, as proven by the family-run Electrofinishing Inc. in Kent. With a permitted daily wastewater discharge volume of 3000 gpd, the facility's operations include anodizing, plating, electroless nickel, and associated cleaning and degreasing. The wastewater associated with its operations is generated from the rinses and may contain heavy metals.

A small dedicated staff performs batch treatment using heavy metal precipitation at the facility. The rinses from the metal bearing waste streams accumulate in the batch treatment tank until full and are then manually treated.



Left to right, front row: Despina Strong, KCIW environmental programs managing supervisor; Tammy Fryer, administrative specialist; Yvonne Raymond, accountant. Second row: Greg Bush, section manager, King County Wastewater Treatment Division; Dave Haberman KCIW compliance investigator; Rick Raymond, general manager; Mike Wheeler, production manager; Brian Barrett, plater.

### **Protective Coatings Inc.**

#### First-time winner



Having won a KCIW EnvirOvation award in 2008, Protective Coatings has continued its outstanding efforts by winning its first Commitment-to-Compliance award. This full-service electroplating and metals finishing shop in Kent has provided decorative and protective finishes for aerospace, automotive, electronics, computer, medical, and recreational industries since 1976. The 84,000 square foot facility is permitted to discharge 35,000 gpd of industrial wastewater, generated from plating operations. The facility has a flow-through treatment system that treats water from the anodizing and plating line.

The facility attributes its excellent record of compliance in part to a training program producing experienced, well-trained employees. Excellent support from its facilities department results in well-maintained equipment.

Left to right, front row: Despina Strong, KCIW environmental programs managing supervisor; Pete Schmaltz, environmental manager. Second row: Peggy Rice, KCIW compliance investigator; Holger Hille, PCC Aerostructures environmental health and safety manager; Rick Munson, general manager; Tufan Yasar, environmental supervisor; Alex Dusenbery, director of operations; Mike Brown, facilities manager; Chris Kottman, waste treatment lead; Mike Meeker, safety officer; Greg Bush, section manager, King County Wastewater Treatment Division.

### KCIW periodically features organizations that can be resources to industrial users of the sewer system



#### The Pacific Northwest Pollution Prevention Resource Center

Addressing the many faces of source reduction

The Pacific Northwest Pollution Prevention Resource Center (PPRC) has spent the past 22 years demonstrating that reducing just about any waste adds to a business's bottom line. Reducing or eliminating waste has been a business practice since there has been business. PPRC specializes in pollution prevention or source reduction, a term generally associated with reducing environmental wastes. The organization works with agencies, other non-profits and businesses to improve economic and environmental performance. Some of the current faces of source reduction at PPRC include:

Lean and Green: Environmental improvements in the manufacturing sector often yield reductions in energy and water, wastewater, solid and hazardous waste, materials, and toxics. PPRC provides the "Green" (of Lean and Green) assistance to manufacturers in the U.S. EPA Region 10. Over the past five years, PPRC has supported or participated in over 15 projects with manufacturers, identifying and assisting with significant improvements in operational efficiency and environmental performance.

Because there are similarities in the use and application of lean manufacturing and source reduction, the two strategies can be carried out simultaneously, often with much higher benefit to the client than if only one discipline were used. Examples of savings include: 15,000 gallons of daily water use was eliminated with pressure regulation on vacuum pumps; \$34,000 of savings in paint purchases and waste disposal due to higher paint transfer efficiency, and 127,000 kWh was reduced due to compressed air leak detection and correction.

E3: is similar to Lean and Green but the focus includes energy and job training, creation, and retention.

Safer Chemicals Partnership: PPRC worked with Ecology and Clean Production Action to help develop and assess a tool to help businesses identify safer alternatives when looking to replace a regulated or hazardous chemical.

**Spray Efficiency Training:** PPRC has worked with 200 businesses and technical schools to provide training to painters and paint instructors. The average painter shows a 20 percent improvement in coverage. In one company alone this resulted in an annual savings of over \$35,000.

**Greening Laboratories:** PPRC's technical assistance and resources promote sustainable laboratory practices for biotech and research laboratories. Resources include a webinar podcast on green chemistry and bench-scale sustainable laboratory practices and a topic hub guide on PPRC's website that provides basic information on biotechnology lab sustainability issues, efforts, and resources.

Rapid Response Research Service: This service, open to any business, agency or non-profit to help requestors get answers to environmental questions, includes developing greener policies and operations, chemical-specific inquiries, and requests for resources to assist further research.

For a wealth of information, including resources, tips, and case studies, visit the Pacific Northwest Pollution Prevention Resource Center at www.pprc.org.

#### **COMPLIANCE SAMPLING** (Continued from page 1)

Every analytical parameter must be collected using appropriate protocols and the overall sample must be representative of the discharge. Sampling staff are a great resource and can share King County's protocols for conducting its environmental sampling to meet EPA protocols with permitees.

The program is still working with several facilities to evaluate the need for flow proportional sampling, an effort that started over three years ago that is addressed with each facility during the renewal process. In 2012, KCIW began additional sampling and testing for semi-volatile organics (BNAs) at selected facilities one year prior to the expiration date for the facilities' current permit cycles. Also beginning in 2012, the program began monitoring for pH on a continuous (24-hour) basis at additional facilities focusing on metal plating facilities in addition to the food-processing sector. This goal was made possible by the addition of new sampling equipment.

#### **Facilities Violate Wastewater Pretreatment Standards**

King County's Industrial Waste Program is responsible for making sure that water used by industries returns to our waterways clean and safe. This protects our water resources, our public health, workers at treatment plants, and the biosolids produced there.

The vast majority of King County's businesses do an excellent job of meeting these clean water goals by treating their industrial wastewater before they discharge it to the sewer. Whenever possible, we work to provide technical assistance and help industries reach compliance before enforcement actions become necessary. If companies violate clean water standards, however, we do take enforcement actions.

The following facilities are users of the sewer system that violated treatment requirements January – June 2013 (or have not had their violations previously published). They were found in significant non-compliance during the reporting period; received fines; had violations that were unique or warranted special attention; or met a combination of those actions.

#### The following facilities send their wastewater to King County's South Treatment Plant, Renton

#### A.O. Smith Water Products Co., Renton

| Nature of Violation/Type of Pollutant:    | Basis for Publication:   | Comment:   |
|---|--|--|
| Monthly Average Discharge violation-zinc. | Facility was in significant non-compliance because, during a six-month period, one monthly average concentration result exceeded the federal technical review criteria (TRC), which is defined as exceeding the limit by a factor of 1.2. Using this criterion, a company is in SNC if 33 percent or more of the samples exceed the TRC in a six-month period. | Facility responded by ceasing discharges of wastewater from designated area and is in compliance with regulations. |

Penalty: A notice of significant non-compliance.

#### Oberto Brands, Kent

| Nature of Violation/Type of Pollutant:       Basis for Publication:       Comment:         Monthly Average Discharge violations-       Oberto Brands had violations that warranted a       Because Oberto Brands continued            |   |  |
|---|---|--|
| Monthly Average Discharge violations- Oberto Brands had violations that warranted a Because Oberto Brands continued   | Nature of Violation/Type of Pollutant:          | Comment:   |
| pH-Acidic.  monetary penalty.  to have pH violations after KCIW issued a final notice/compliance order in December 2011, KCIW issued an assessment of penalty and compliance order in June 201; requiring the facility to upgrade its | Monthly Average Discharge violations-pH-Acidic. | to have pH violations after KCIW issued a final notice/compliance order in December 2011, KCIW issued an assessment of penalty and compliance order in June 2013 requiring the facility to upgrade its pretreatment system to consistently |

Penalty: A \$875 fine, \$1,975 post-violation and monitoring charge, and a compliance schedule.

## The following facility sends its wastewater to King County's West Point Treatment Plant, Seattle Seattle Barrel Company, Seattle

| Nature of Violation/Type of Pollutant:   | Basis for Publication:   | Comment:   |
|--|--|--|
| A single incident occurred during a routine KCIW sampling when an employee was observed manually bypassing the final stage of the wastewater treatment system and associated discharge of concentrated wastes that did not meet permitted discharge to the sanitary sewer. | Seattle Barrel Co. had violations that warranted a monetary penalty. | The company independently provided additional waste management training to its employees and completed items required in the compliance order. |

Penalty: Facility received a \$1,575 fine, \$3,490 post-violation charge and a compliance order.

**Other Enforcement Actions:** KCIW also acted on six other violations at six facilities for the following: discharge rate (1), and late reports (5).

We all need to work together to prevent pollution. If you have information for KCIW or questions about our program, see contacts on page 3.



Department of Natural Resources and Parks Industrial Waste Program
130 Nickerson Street, Suite 200
Seattle, WA 98109-1658

PRSRT STD U.S.POSTAGE PAID SEATTLE, WA PERMIT NO. 01605

RETURN SERVICE REQUESTED





#### Photos, anyone?

KCIW is seeking facilities with wastewater discharge approvals to volunteer for a small number of brief onsite photo shoots.

Our goal is to obtain photos of basic pretreatment operations and employee interactions with our compliance investigators. Facilities will not be identified and likely will not be identifiable when the photos are used in County newsletters, fact sheets and other print and electronic publications. The photos will only be retained by KCIW if the facility approves them.

To discuss volunteering, contact the program. We appreciate your help!